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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,386	02/12/2004	Konstantinos Chondroudis	SMX 3152.1 (2002-110R1)	4581

321 7590 10/03/2005

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EXAMINER

HAILEY, PATRICIA L

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/777,386

Applicant(s)

CHONDROUDIS ET AL.

Examiner

Patricia L. Hailey

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 19-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 19-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

Applicants' remarks and amendments, filed on July 20, 2005, have been carefully considered. Claims 16-18 have been canceled, and new claims 50-54 have been added.

Claims 1-15 and 19-54 are now pending in this application.

Support for the amendments to claims 1, 19, and new claims 50-54 can be found in the Specification at, inter alia, paragraphs [0006], [0007], and [0041].

New Grounds of Rejection

The following New Grounds of Rejection are being made in view of Applicants' amendments, and in view of the Examiner's reconsideration of the instant claims and of copending Application Serial No. 10/777,482.

Double Patenting

1. *Claims 1-15 and 19-54 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7, 10-16, 18-23, 31-34, 36, 38, 39, 42, and 44-46 of copending Application No. 10/777,482.*

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the instant application are directed to a method for forming a supported metal-containing powder, wherein a dispersion of a particulate support in a solution (which comprises a solvent and a dissolved metal) is formed, subjected to heat removal to precipitate the dissolved metal onto the particulate support, and separated from the solution to yield the supported metal-containing

powder, whereas the claims in the '482 application are directed to a method for forming combinatorial libraries of supported metal-containing powders, said method comprising basically the same steps as recited in the instant application.

In short the difference between the respective sets of claims is the preparation of only one dispersion, versus a "plurality of dispersions" (see, e.g., claim 1 of the '482 application).

The concept of duplication is not patentable. St. Regis Paper Co. v. Bemis Co. Inc., 193 U.S.P.Q. 8, 11 (7th Cir. 1977). While this decision relates to the duplication of parts, there is no reason why such duplication cannot be extended to a process step.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

This double patenting rejection also takes into consideration the filing of a Preliminary Amendment in the copending application on February 12, 2004.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. *Claims 1-3, 7, 8, 14, 15, 19-24, 26-30, 47, 48, and 50-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over French Patent No. 2,315,318 (hereinafter "the French Patent") Applicants' submitted art.*

The French Patent teaches a process for preparing an electrochemical catalyst, wherein a support is impregnated with a solution of a metal salt under vigorous agitation to obtain a paste, the paste is frozen by immersion into liquid nitrogen and then dried by freeze-drying to obtain a fine powder, and the powder is reduced under a

hydrogen atmosphere at a reduction temperature of 150°C-600°C, followed by passivation and cooling of the powder, preferably under an inert atmosphere by the controlled introduction of oxygen. See the paragraph bridging pages 1 and 2 of the French Patent.

Examples of the support include finely divided carbon; examples of the metal salt include nitrates, as well as any salts soluble in an aqueous medium or solvents such as methanol or acetone, of metals such as platinum, ruthenium, palladium, rhodium, and iridium. See page 2, lines 3-28 of the French Patent.

Although the French Patent does not specifically state that, during the freeze-drying step (considered to read upon Applicants' "separating...by freeze-drying"), that "a portion of the frozen solution is allowed to melt", it would have been obvious to one having ordinary skill in the art at the time the invention was made to expect that, during the prior art's steps of reducing at a temperature of 150°C-600°C, or even prior to the reduction step (i.e., after the freeze-drying step), the powder would exhibit some degree of melting due to the reduction temperature, or even due to the change in temperature after freeze-drying is completed.

Response to Arguments

In response to Applicants' arguments regarding the provisional obviousness-type double patenting rejection, the appropriateness of this rejection is in that both

applications are pending, and, as set forth above, not patentably distinct from one another, regardless of whether either application is deemed allowable.

Applicants' arguments regarding the newly added claim limitation directed to allowing the frozen solution to melt have been considered, but are deemed to have been addressed in the above discussion of the French Patent.

In response to Applicants' arguments that the claimed invention removes heat from the dispersion "by contacting the container in which the dispersion is present with a cryogenic liquid", the Examiner respectfully points to page 2, lines 13-28 of the French Patent, especially lines 27 and 28, wherein the support is placed in a vessel (line 13), the support is impregnated with an aqueous solution of a noble metal salt to form a paste, and the "paste is instantly frozen by immersion into liquid nitrogen and dried by freeze-drying." Nothing in the French Patent indicates that the paste is removed from the vessel prior to immersion in liquid nitrogen.

For these reasons, Applicants' arguments are not persuasive.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

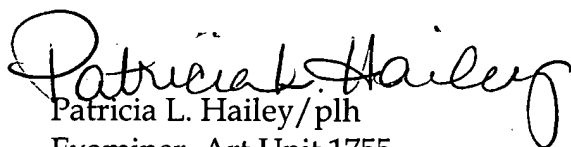
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Fridays.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

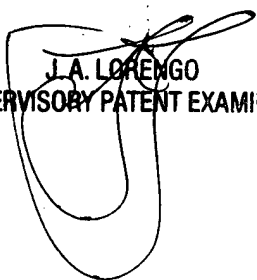
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patricia L. Hailey/plh
Examiner, Art Unit 1755
September 28, 2005



J.A. LORENZO
SUPERVISORY PATENT EXAMINER